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(54) Title: **PURIFIED AND ISOLATED HEPARAN SULFATE 3-O-SULFOTRANSFERASE ISOFORM 5 NUCLEIC ACIDS AND POLYPEPTIDES AND THERAPEUTIC AND SCREENING METHODS USING SAME**

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F N Q K P Y Q I T G R T L N W P * 346

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(57) Abstract: 3-OST-5 proteins, and nucleic acid molecules encoding the same. Recombinant host cells, recombinant nucleic acids and recombinant proteins are also disclosed, along with methods of producing each. Isolated and purified antibodies to 3-OST-5 homologs, and methods of producing the same, are also disclosed. 3OST-5 gene products have biological activity in specific heparan sulfate 3-O-sulfotransferase reactions. These reactions provide unique modified heparan sulfate. Thus, therapeutic methods involving this activity are also disclosed.



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